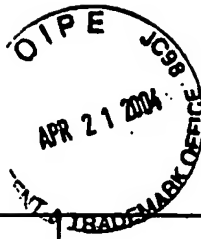


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PTO/SB/08A (08-00)

Substitute for form 1449A/PTO		Complete if Known			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/759,028		
		Filing Date	January 20, 2004		
		First Named Inventor	Erik J. SHAHOIAN et al.		
		Group Art Unit	Unassigned		
		Examiner Name	Unassigned		
Sheet	1	of	4	Attorney Docket Number	IMMR-066/02US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code ² (if known)		
J-L	A1	6,468,158		Ootori et al.	10-22-2002
	A2	6,424,333	B1	Tremblay et al.	07-23-2002
	A3	6,422,941	B1	Thorner et al.	07-23-2002
	A4	6,275,213		Tremblay et al.	08-14-2001
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	A6	6,088,017		Tremblay et al.	07-11-2000
	A7	5,785,630		Bobick, et al.	07-28-1998
	A8	5,766,016		Sinclair et al.	06-16-1998
	A9	5,650,704		Pratt et al.	07-22-1997
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	A17	5,240,417		Smithson et al.	08-31-1993
	A18	5,212,473		Louis	05-18-1993
	A19	5,186,695		Mangseth et al.	02-16-1993
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	A21	5,038,089		Szakaly	08-06-1991
	A22	5,035,242		Franklin et al.	07-30-1991
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	A24	5,019,761		Kraft	05-28-1991
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	A26	4,930,770		Baker	06-05-1990
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¹ Unique citation designation number.

² See attached Kinds of U.S. Patent Documents.

Examiner Signature	<i>Dean [Signature]</i>	Date Considered	9/28/2006
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				Group Art Unit	Unassigned
				Examiner Name	Unassigned
Sheet	2	of	4	Attorney Docket Number	IMMR-066/02US

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		Office ¹	Number ²	Kind Code ³ (if known)			
J.L.	B1	JP	H4-8381		Taito Corporation	01-13-1992	<input checked="" type="checkbox"/>
	B2	JP	H2-185278		Taito Corporation	07-19-1990	<input checked="" type="checkbox"/>
	B3	JP	H7-24147		Sega Corporation	01-27-1995	<input checked="" type="checkbox"/>
	B4	JP	H5-192449		Taito Corporation	08-03-1993	<input checked="" type="checkbox"/>
J.L.	B5		0 349 086		Stork Kwant B.V.	01-03-1990	

OTHER - NON PATENT LITERATURE DOCUMENTS							
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.					T ²
J.L.	C1	AUKSTAKALNIS et al., "Silicon Mirage: The Art and Science of Virtual Reality," ISBN 0-938151-82-7, pp. 129-180, 1992.					
	C2	BLISS, "Optical-to-Tactile Image Conversion for the Blind," IEEE Transactions on Man-Machine Systems, Vol. MMS-11, No. 1, pp. 58-65, March 1970.					
	C3	CALDER, "Design of A Force-Feedback Touch-Introducing Actuator For Teleoperator Robot Control," Bachelor of Science Thesis, MIT, June 23, 1983.					
	C4	"Cyberman Technical Specification," Logitech Cyberman SWIFT Supplement, 4/5/1994.					
	C5	EBERHARDT et al., "Inducing Dynamic Haptic Perception by The Hand: System Description and Some Results," DSC-Vol. 55-1, Dynamic Systems and Control: Volume 1, ASME 1994, pp. 345-351.					
	C6	GOBEL et al., "Tactile Feedback Applied to Computer Mice," International Journal of Human-Computer Interaction, Vol. 7, No. 1, pp. 1-24, 1995.					
	C7	JOHNSON, "Shape-Memory Alloy Tactile Feedback Actuator," Armstrong Aerospace Medical Research Laboratory, AAMRL-TR-90-039, August, 1990.					
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¹ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).

² For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

³ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible.

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		Application Number	10/759,028		
		Filing Date	January 20, 2004		
		First Named Inventor	Erik J. SHAHOIAN et al.		
		Group Art Unit	Unassigned		
Examiner Name	Unassigned				
Sheet	3	of	4	Attorney Docket Number	IMMR-066/02US

OTHER - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
J.L.	C13	PIMENTEL et al., "Virtual Reality: through the new looking glass," 2 nd Edition; McGraw-Hill, ISBN 0-07-050167-X, pp. 41-202, 1994.	
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	C16	"Technical Manual Overhaul Instructions With Parts Breakdown, Coaxial Control Shaker Part No. C-25502," Safe Flight Instrument Corporation, Revised 15 July 1980 (23 pages).	
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	C19	Iwata, "Pen-based Haptic Virtual Environment," 0-7803-1363-1/93 IEEE, pp. 287-292, 1993	
	C20	Russo, "The Design and Implementation of a Three Degree of Freedom Force Output Joystick," <i>MIT Libraries Archives</i> pp. 1-131, May 1990, archived 8/14/90	
	C21	Brooks et al., "Hand Controllers for Teleoperation - A State-of-the-Art Technology Survey and Evaluation," <i>JPL Publication 85-11</i> , NASA-CR-175890; N85-28559, pp. 1-84, 03/1/1985	
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	C24	Snow et al., "Model-X Force-Reflecting-Hand-Controller," NT Control No. NPO-17851; JPL Case No. 7348, pp. 1-4 with 45 pages of attachments, 06/15/1989	
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J.L.	C36	Bejezy et al., "Generalization of Bilateral Force-Reflecting Control of Manipulators," <i>Proceedings Of Fourth CISM-IFTOMM</i> , Sep. 8-12, 1981	

Examiner Signature	<i>Sam Leger</i>	Date Considered	9/28/2006
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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		Application Number	10/759,028		
		Filing Date	January 20, 2004		
		First Named Inventor	Erik J. SHAHOIAN et al.		
		Group Art Unit	Unassigned		
		Examiner Name	Unassigned		
Sheet	4	of	4	Attorney Docket Number	IMMR-066/02US

OTHER - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
J.L.	C37	McAffee et al., "Teleoperator Subsystem/Telerobot Demonstrator: Force Reflecting Hand Controller Equipment Manual," JPL 1988, JPL D-5172	
	C38	Minsky, "Computational Haptics: The Sandpaper System for Synthesizing Texture for a Force-Feedback Display," Ph.D. Dissertation, MIT, June 1995, archived 7/6/95	
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¹ Unique citation designation number.

² Applicant is to place a check mark here if English language Translation attached.

Examiner Signature	<i>Don Agnew</i>	Date Considered	9/28/2006
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Sheet 1 of 1

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Application Number	10/759,028
Filing Date	January 20, 2004
First Named Inventor	Erik J. Shahoian
Art Unit	3711
Examiner Name	Unassigned
Attorney Docket Number	IMMR066/02US

U.S. PATENT DOCUMENTS

Examiner	Cite No. ¹	Document Number Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
J-L		6,160,489	12/12/2000	Perry et al.	
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		5,575,761	11/19/1996	Halianpour	
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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
J-L		WIKER, "Teletouch Display Development: Phase 1 Report," <i>Technical Report 1230</i> , Naval Ocean Systems Center, San Diego, July 1988.
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VJL		ROSENBERG, "Virtual Fixtures: Perceptual Overlays Enhance Operator Performance in Telepresence Tasks," <i>Ph.D. Dissertation</i> , Stanford University, June 1994.

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